SYLLABUSES IN THE VOCATIONAL SUBJECTS UNDER THE REVISED MYSORE S.S.L.C. SCHEME.

I. MENSURATION, SURVEYING AND DRAUGHTSMANSHIP.

MENSURATION.

V Form.—Definitions and first principles in Geometry, tables of Lineal and Square measures, determination of sides and peri-meters of right-angled triangles, any triangle, parallelograms, similar figures; rules for finding out lengths, of circumference of a circle and areas of segments and sectors. Determination of areas of triangles and parallelograms.

VI Form.—Determination of areas of circles, sectors, segments of circles and of irregular plain figures by middle ordinate and Simpson's rules. Determination of surfaces and volumes of cylinders and cones. Estimation of areas, surfaces and volumes from actual measurement of objects mentioned above. Practical rules for the measurement of timber. Calculation of the weight of a body when its volume and specific gravity are known.

SURVEYING.

V Form.—Running a chain line, methods of passing obstacles; measuring of offsets; use of cross staff; well conditioned triangles, check or tie lines, keeping the field books, testing the chains. Plotting and Office work, construction and use of plane scales and plotting a chain survey.

VI Form.—Use of plane table, surveying with plane tables, compass and chain. Different technical vernacular names used in Mysore Revenue Survey. Plotting and Office work. Plotting a compass survey; reduction of irregular plane figures to equivalent triangles or rectangles, estimation of areas of plotted work by "area square."

DRAUGHTSMANSHIP.

V Form.—Use of drawing instruments and scales, simple problems relating to lines, triangles, quadrilaterals and circles.

VI Form.—Plan and elevation of common and simple objects such as book case, chest of drawers, box, desk, bench, etc., copying plan and elevation of simple buildings from rough sketches.

II. MECHANICAL SHOP AND FITTERS' WORK.

V Form.

Fitting:—

(*a*) Chipping a block and filing true to level.
(*b*) Cutting groves with a cross cut chisel and filing it by means of a square file and making keys to suit them.

Smithy:—

(*a*) Lessons in drawing out, jumping and welding.
(*b*) Making calipers outside and inside.
(*c*) Making of dividers.
(*d*) Making of cold chisel, cross-cut chisel, diamond pointed chisel and round nose chisel.
(*e*) Beating out an hexagonal section out of a round rod of 1" dia. and making forgings out of a nut and a bolt.

Machine Shop:—

(*a*) Explanation of the parts and the functions of a lathe. A practical demonstration of what a lathe can do with explanation at every stage.
(*b*) Checking work in a lathe.
(*c*) Plain and taper turning of rods and squares.

VI Form.

Fitting:—

(*a*) Key way and key making, straight, taper feather keys and fitting these.
(*b*) File a square rod approximately round to a distance of 4".
(*c*) Hand drilling and tapping.
(*d*) Make a small model or parts of a model.

Smithy:—

(*a*) To make a pair of tongs and other smith's tools.
(*b*) Spanners, single-headed for hexagonal and square-headed bolts.
(*c*) A plough share (rough) with a M. S. Plate. This exercise may be repeated till a student makes a good model, as this involves a good many processes in Smithy work.

Machine Shop:—

(*a*) Right and left hand V thread (standard whitworth) with explanations for the different sizes and number of threads for different sections of rods.
(*b*) Threading a nut and a bolt and fitting them.
(*c*) Brief explanations of various operations done by (1) shaping machine, (2) planing machine, (3) drilling machine.

An explanation as to how all the operations done by 1, 2 and 3 are actually those that the student is already familiar with on the lathe. How the operations on these machines differ from those on the lathe.

Drawing:—

First and Second Year.—

Ex. 1. Method of representing C.I., W.I., steel, brass, lead, wood, in sections on paper.
Ex. 2. Drawing—Chipping blocks, vice, hammers, file, chisels, drills, try square.
Freehand Grinding, stone surface, plate, screw drivers, spanner, calipers, scribing block, steel rule, bevel square, marking pin, centre punch, dividers.
Ex. 3. Bolt and Nut (5" × 1").
(*a*) V Threads (Right and Left hand).
(*b*) Square threads.
(*c*) Double square threads.
Ex. 4. Foundation bolt with plate.
Ex. 5. Rivetted joints.
Ex. 6. Pipe joints.

III. PATTERN-MAKING AND FOUNDRY WORK.

V Form.

Pattern-Making:—

Tools and their uses.
Timber and its uses.
Methods of seasoning timber.
Preservation of timber.
Planing.
Chipping.
Sawing.
Cutting grooves at different angles.
Half-lap joint.
Mortise and Tennon joint.
Dove-tail joint.
Simple patterns for pulleys and pipes.

VI Form.

Foundry work:—

Moulding sand.
Foundry tools and their uses.
Levelling moulds.
Preparing cores for simple moulds.
Preparing moulds for chipping block and straight pipe.
Crucible and cupola practice.
Simple casting of brass and gun metal.

IV. PRINTING.

(TWO YEARS' COURSE.)

V Form.

First year:—

Types, their composition, classification according to their bodies and faces and their uses; Compositors' tools and appliances and their uses; the principles of good composition in ordinary and tabular work; theory of making up and ordinary imposition; elementary knowledge on book production; elementary punctuation and proof-reading and sizes and division of ordinary printing and writing papers.

Practical:—

Ability to distribute type; to compose plain and simple tabular matter from manuscript copy at a reasonable rate of speed to make up a forme of octavo and impose it; and to correct proofs in metal. To read and mark corrections in an ordinary book with proof in slip and made up page and to finally revise the same for press.

SECOND YEAR.

VI Form.

Theory:—

Principles of construction of hand presses, cylinder and treadle machines; mode of making ready ordinary work; common defects; their cause and remedy; and rollers, their composition mode of manufacture and treatment.

Practical:—

To make ready and print off a solid or open forme; and to test the condition of rollers and to make them fit for use.

ELECTRIC WIRING AND FITTING.

V Form.

1. Purpose of wiring.
2. Simple principles of Static Electricity.
3. Simple principles of Dynamic Electricity.
4. Ohm's Law and its explanation.
5. Primary Cells.
6. Conductors and Insulators.
7. Explanation of Volt, Ampere, Watt and Watt-Hour.
8. Meaning of a Mill-foot.
9. Meaning of a Circular Mill.
10. Calculation of Drop.
11. Calculation of the size of wire for a given drop.
12. Wiring rules.
13. Calculation of Resistance for branch circuits.
14. Carrying capacity of wires and cables.
15. Effect of heat upon Resistance.
16. Allowance for Heat.
17. A simple electric light circuit.
18. Examples of the application of the wiring table and formula.
19. Different kinds of joints of bare wires and cables and the insulating of such joints.

VI Form.

Different kinds of House wiring system:—

1. Open or exposed wiring-advantages of; Knob wiring, cleat wiring.
2. Wiring run in Mouldings-wooden and Metal Mouldings.
3. Henley's Wiring.
4. Electrician's plans and simple drawings and sketching.
5. Feeders and Mains.
6. Distribution, Board-switches, Joints and connections-Fuses Plug connectors-Ceiling Roses-Fittings for supporting-Lamps Lamp Holders, etc.
7. Different kinds of lamps and their efficiency.
8. Simple Principles of Storage Batteries-Their Installation and Wiring.
9. Wiring of Electric Bells and Indicators and Simple Telephones.
10. The connection of Ammeters, Voltmeters, Wattmeters and Watthour meters and their calculation,
11. Testing of Lighting Installations and Locating simple faults.
12. Specifications and Estimating.

VI. WEAVING.

(TWO YEARS' COURSE.)

V Form.

1. Cotton plant-general varieties-means of cultivation-geographical distribution-long and short staple cotton the difference in quality between first picked and second picked bolls.

2. Cotton ginning-the necessity for ginning hand-ginning with the aid of roller gin.

3. Carding cotton-necessity for carding-Carding with hand bow. Principles of a carding machine.

4. Preparation of slivers and principles underlying the making of proper ones for Charaka spinning.

5. Spinning yarn on the charaka and takli, importance of the uniformity and twist of yarn-the significance of the terms leas, hanks, knots, bundles and bales and their vernacular equivalents-Calculation of counts-Doubling the yarn.

6. Weaving and its principles-Warp and weft-Names of appliances used in weaving.

7. Machine yarn-hand-spun yarn-advantages of one over the other.

8. The loom and its parts and accessories-Technical names of the parts and accessories-their vernacular equivalents-the important functions of each.

9. Simple calculation and preparation of Warps-for a plain cloth, handling all the preparatory appliances such as the Ratey, Warping Mill, Peg Warping frame, bobbin, creel frame, etc. The importance of the formation of leas.

10. Weaving at the loom ordinary plain cloth in coarse counts and in coloured wefts. Importance of a good selvedge.

VI Form.

1. Sizing-necessity for sizing, sizing ingredients-appliances for sizing-Practice in country method of sizing on the bendigey or X shaped stand. Sizing with the aid of Section sizing machine. Black Board demonstrations only.

2. General knowledge of the different types of hand looms-Hand throw shuttle looms. Pit-fly-shuttle looms, Frame- Fly-shuttle looms, Automatic looms.

3. Tuning the different motions of the looms and specific study of the following.
Reeds, healds, slay, shuttle, pirn, treadle, temples, leas, rods, back rest, cloth beam, warp beam.

4. Examination of fabrics by the counting glass or linentester. Calculation of reeds, healds for particular fabrics and quantities of warp and weft required for particular lengths and widths of cloth.

5. Designing of twill textured cloth on the graph paper-tying of treadles for same.

6. The function of the Tappet and its adjustment.

7. The preparation and Looming of warps and weaving fabrics like towelling, twill, checks, kanas with coloured borders.

8. Calculating the cost of cloth.

VII. BLACK-SMITHY.

V Form.

(As a preliminary to regular Blacksmithy, it is necessary that pupils have some practice in the hammering of Lead into prescribed shapes and sizes.)

Descriptive and Practical:—

(*a*) The study of the Anvil and Hammer-Exercises involving Hammering-Drawing Upsetting, etc.

Exercise I-Stock 5" x 1" Dia. To draw the piece into an uniform cross-section of $\frac{3}{4}$" square. Converting the (Lead work) square prism into an Octagonal one and finally to a flat chisel.

Exercise 2—Stock $6\frac{1}{2}$" × $\frac{3}{4}$" Dia. The piece to be upsetted to form a square prism of $\frac{3}{4}$" cross-section. Rounding and tapering the two ends of the whole prism and bending to form a "S" hook.

Exercise 3-The making of rings (open but joint). Fork, Angle bends.

(*b*) The smith's forge-its care and operation. Types of forges:—stationary and portable; Air blast by Fan, Blower or bellows, Study of bellows in detail.

Forge's Fires:—Building up-fuel used, coal, coke, charcoal. Use of paddy husk.

Practical study and use of—

Blacksmithy tools-the anvil, shovel, poker. Swage-Black Tongs.
Hand tools-Hammers and sledges-forming and cutting tools.
Floor and bench tools-Swage Block-Leg and Bench Vices-Calipers-Compasses.
Marking and measuring materials and tools. Scribers-Marking punches-Blacksmith's Rule.

VI Form.

Forging Operations.—

Exercise 1—To make a cold chisel or centre punch, octagonal body in M. S. finished Black and hasp and staples.

Exercise 2-(*a*) To make hexagonal headed bolts and nuts. (*b*) Simple welding.

How is Iron obtained. A brief description of the Bhadravati Iron Works. Properties of different kinds of Iron.

Brief notes on Hardening, Tempering, Annaeling and case hardening.

Practical Exercises.—

(1) Compasses or Dividers, (2) Nuts, (3) Spanners, (4) Keys and (5) Simple agricultural implements such as a plough-share and a weeding fork.

VIII. PHARMACY.

(TWO YEARS' COURSE.)

A knowledge of the following—

Operations requiring the use of heat; evaporation with particular reference to the preparation of extracts; special characters and modes of preparing the various classes of extracts; water steam and sand baths; distillation, apparatus employed, the retort and receiver, still, Liebig's condenser; principles on which they are constructed and used. The principles of sterilisation. Sublimation; official products of sublimation calcination and fusion. Dessication; drying ovens, principles on which they are constructed and used. Disintegration of solid substances: cutting, bruising and pulverisation, apparatus employed, methods for controlling the degree of comminution; sieves and sifting; trituration, levigation, elutriation, granulation.

Filtration, objects and methods, filtering media, means of expediting filtration dialysis.

Expression, methods of obtaining the juices from plants, recovery of residual liquids from tincture presses, etc., screw hydraulic and other presses.

Solution, ideal, nature, solvent power of various menstura, influences of (*a*) temperature, (*b*) state of division of the substance to be dissolved, (*c*) time, (*d*) position of the substance in the menstruum; lixiviation, infusion, digestion and decoction; maceration; percolation and displacement, principles on which the successful performance of these processes depend; form and material for percolators and other vessels employed.

PRACTICAL WORK.

A. To recognise specimens of crude drugs mentioned below:—

1. Acacia Bark and Gum.
2. Aloes
3. Asafœtida.
4. Aurant Cort.
5. Arecæ Semina.
6. Azadirachta Indica.
7. Bela Fruit.
8. Belladonna Fol and Rad.
9. Butea—Gum and seed.
10. Calendulæ Flores.
11. Calumba Root.
12. Cambogia.
13. Camphor.
14. Canellac, Cortex.
15. Cannabis Indica.
16. Capsicum.
17. Cardamoms.
18. Cascara Sagrada.
19. Cassiæ Cortec and Pods.
20. Catechu.
21. Chirata.
22. Cinchona Bark.
23. Cochineal.
24. Colchicum Corns and seeds.
25. Colocynth.
26. Coriander.
27. Cubebs.
28. Datura Fol and Sen.
29. Digitalis.
30. Eucalypti Folia.
31. Euphorbium.
32. Gentian root.
33. Glycyrrhiza root.
34. Hyoscyan Fol.
35. Hyescyami Semina.
36. Ipecac root.
37. Ispaghula seeds.
38. Jalap rhizon.
39. Kaladana.
40. Moschus.
41. Mylabris.
42. Piper nigrum.
43. Nux Vomica.
44. Picidrhiza.
45. Pyrethrum Rhubarb.
46. Piper mlgrum.
47. Pharbitis.
48. Sarsac Radix.
49. Sinapsis Albæ Semina.
50. Sinapsis Nigrace Semina.
51. Stramonii Semina.
52. Sarsaparilla.
53. Senna.
54. Tinospora Cordiflia.
55. Taraxacium.
56. Valerian.

B. To recognise any of the plants in the following list:—

1. Avena Sativa.
2. Colchicum auturamale.
3. Eatura Stramonium.
4. Digitalis Purpurea.
5. Hyoscyamus Niger.
6. Mentha piperita.
7. Menthaviridis.
8. Papyver Rhoeas.
9. Papyver Somniferum.
10. Taraxacum officinale.
11. Valerina Officinalis.

C. To identify by chemical tests the following organic compounds:—

Oxalates, acetates, tartarates, citrates, sucrose, ethyl, alcohal, glycerine.

D. Compounding—Making mixtures, emulsions, infusions, powders, pills and plasters.

IX. AGRICULTURE.

V Form.

1. Elementary Botany:—

The plant and its parts, structure and functions of seed, roots, leaves, stem, flowers—nutrition, importance of light, warmth, moisture, air and soils in plant growth, with special application to Agriculture, 10 lessons.

2. Soils:—

Methods of formation. Weathering soils and sub-soils—Mechanical analysis and physical composition—classification of clays, sands, loam, marls, black cotton soils—properties of soils in relation to moisture. How moisture exists in the soil, hygroscopic, capillary, water holding capacity of soils, the water table, how moisture leaves the soil—control and conservation of soil moisture—effect of tillage methods. [illegible] of physical composition—soils and colour importance of depth—chemical compos[illegible] of soils—rich and poor soils. 8 lessons.

3. Irrigation:—

Sources—methods of irrigation, quantity and frequency as affect[illegible]ferent soils, season and crops, common water lifts. 5 lessons.

4. Drainage:—

Conditions which require methods of drainage, surface drainage, under-ground drainage. 5 lessons.

5. Soil improvement:—

Soil mixing and the advantages of—addition of clay, tank silt, sand, chalk, green-manuring, Alkali soils, their nature and how to reclaim them. 4 lessons.

6. Tillage:—

Objects—methods—preparatory—interculture—weeds and how they spread and how to eradicate them—implements of tillage, ploughs, cultivators, clod crushers, harrows—local and improved ploughs—two way and one way ploughs—ridging plough, methods of ploughing, "gathering," "splitting," hoes. 10 lessons.

7. Manures:—

Nature of plant food—farm yard manure, composition, variation in quality, methods of conserving, sheep folding, green manures, tank silt composts, lime stone, oil cakes, bone meal, artificial manures—their composition—methods of application and quantities to apply. 10 lessons.

8. Seeds :—

Nature and importance of good seeds—methods of selection—seeds testing—treatment of seed against diseases—sowing methods, the country seed-drill and its types—depth and spacing quantities to sow—principles of plant improvement. (60 Class room lessons and 30 periods for study of implements, and manure and methods of cultivation in the field.)

VI Form.

9. Plant propogation, layering, grafting, budding, with exercises. 6 lessons.

10. Insect Enemies:—

Nature of insect attacks, mouth parts of insects, life history and study of typical pests, aphides, rice grass hopper, the rhinoceros, beetle—castor semi looper, kumbli hula, the lime tree borer, nature of combative methods, sprays and spray pumps.

11. Fungus diseases:—Nature of plant diseases common diseases, damping off, mildews smut of jola, Ring diseases of Potato—kole roga Red rot of sugarcane—common remedies. 6 lessons.

12. Crops:—Rotation of crops—importance and general principles of planning some typical rotations, crops grown as Dry, Wet and Garden crops important crops—and methods of cultivation—paddy, sugercane, ragi, jola, the minor dry grains—pulses and oil seeds and cotton, potatoes, onions, turmeric, plantains, arcca, pepper, cocoanuts, mulberry. 18 lessons.

13. Dairying:—Animal Husbandry:—

Milk—its composition and care—preparation of butter-composition of curds, skim, whey, cattle feeds, their composition, concentrated feeds, coarse feeds, grass, hay and straw maintenance diet, selecting of feeds. Breeds of Mysore Cattle and their distribution and characteristics. 10 lessons.

14. Common diseases of cattle—symptoms—methods of treatment .—

Practical work to principally comprise (1) cultivating two dry and two wet land crops, generally obtained in the neighbourhood, (2) Observation plots to grow all the principal field crops of the state, (3) Some fruits, flowers in a small garden area chiefly with a view to give practice in pruning, grafting, budding and other garden methods. All cultivation to be placed so as to illustrate the class room lectures generally regarding manure, tillage, etc. 12 lessons.

30 periods may be utilised for excursions and field work in each class.

List of reference books to teachers.—

1. Fream's Elements of Agriculture.
2. Bailey's Principles of Agriculture.
3. Mollison's Text Book of Indian Agriculture.
4. Mukerji's or Nichol's Tropical Agriculture.
5. Rangachari's Botany.
6. Publication of the Mysore Department of Agriculture.
7. Fletcher's South Indian Insects.
8. Osterhout's Experiments with plants.
9. King's Irrigation and drainage.

X. SERICULTURE.

(TWO YEARS COURSE.)

V Form.

1. Mulberry Cultivation:—
   (*a*) General knowledge about the soil fit for mulberry, varieties of mulberry, etc.,
   (*b*) Methods of cultivation of mulberry. 15 periods.

2. Rearing of silk worms:—
   (*a*) The varieties of silk worms.
   (*b*) General idea about the life history of silk worms.
   (*c*) Brushing, feeding, change of beds, and care of worms in different stages.
   (*d*) Mounting and harvesting. 25 periods.

3. Silk worm rearing house—Sanitation and equipment. 10 periods.

PRACTICAL WORK.

1. Mulberry cultivation-selection and preparation of cuttings for planting, pruning.

2. Rearing-Study of worms in several ages, feeding of worms, cleaning of beds, spacing, mounting and harvesting and sorting of cocoons.

3. Rearing houses-selection and handling of appliances, disinfection of rearing rooms. 40 periods.

VI Form.

1. Disease of silk worms, and methods of prevention-Pebrina, Flachherie, Grasserie. 10 periods.

2. The silk worm seed:—
   (*a*) Grainage appliances.
   (*b*) Selection of cocoons for seed
   (*c*) Emergence and pairing of moths.
   (*d*) Examination of moths.
   (*e*) Preservation of seed.
   (*f*) Packing seed for despatch. 20 periods.

3. Manufacture of raw silk:—
   (*a*) Reeling methods.
   (*b*) Reeling machines and appliances.
   (*c*) Handling, stifling, drying and storing cocoons.
   (*d*) Reeling-cooking and reeling.
   (*e*) Inspection of raw silk.
   (*f*) Waste silk. 15 periods.

4. The place of sericulture in the rural economy of Mysore State. 10 periods.

PRACTICAL.

1. External study of the diseased worms.
2. Microscope and its use.
3. Practice in Grainage work.
4. Practice in reeling. 35 periods.

Reference books for teachers.—

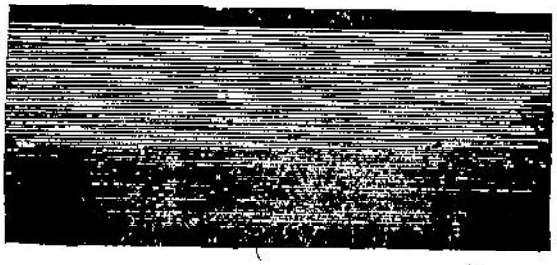
1. Hand-book of Sericulture-Rearing of Silk Worms, by M. Yonehura and N. Rama Rao.
2. Hand-book of Sericulture by N. G. Mukherjee.

XI. PRINTS AND ENGRAVING.

V Form.

Preparation of wood and lead plate for engraving.
Handling of gravers.
Engraving straight lines and curves and taking prints.

Exercise : as per samples 1 and 2.



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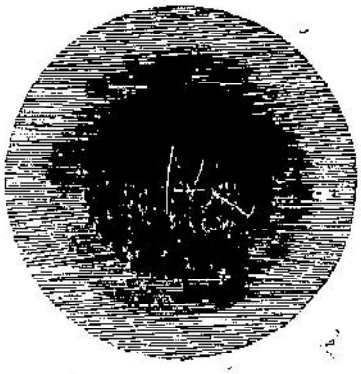
(SAMP. 2)

Studies in light and shade.
Practice in floral and decorative outline.
Lettering.

Exercise : as per samples 3, 4 and 5.



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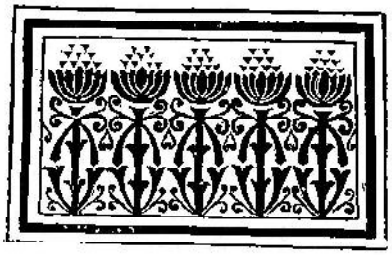
MADE IN

(SAMP. 5)

VI Form.

Engraving simple designs in lead and wood.
Practice in different styles of lettering.
Lessons on the engraving of monograms.

Exercise : as per samples 6 to 10.—



(SAMP. 6)

a b c d e f g h i j k
l m n o p q r s t u
v w x y z

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Patriot

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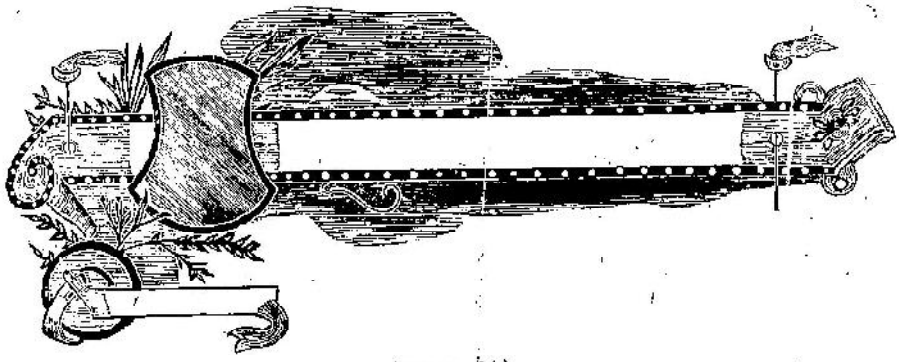
(SAMP. 10)

Engraving simple decorative designs in metals.
Letter heads :
Exercise : as per samples 11 to 17.



(SAMP. 11)

Studies of birds, animals and landscape with back-ground.
Preparation of visiting cards.

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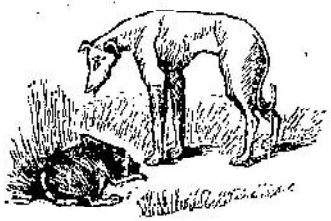
(SAMP. 12)



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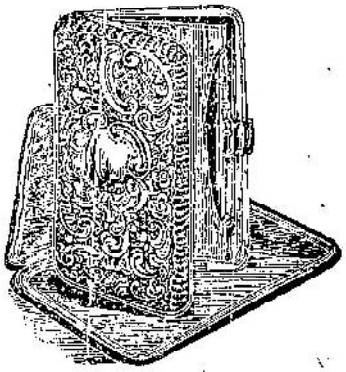

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XII. WOODWORK.

V Form.

Sawing-Use of hand. Tenon and Rip Saws.
Planing-Jack plane, use of Try Square and Marking Gauge.

The making of simple joints, Nailing. Use of Brad-awl and Hammer and Mallet.

Screwing—Gimlet and Screw Driver.
Paring—Use of chisel and scraper.
Boring—With Brace and bits.
Plan, elevation and simple sectional Drawing.
Demonstrations on uses of various tools.
Lessons on different kinds of wood and their value for special purposes. (With special reference to woods grown in Mysore).

Making of the following models :—

1. Key Rack 10″×″2×½″—Designs may vary slightly.
2. Picture Frames-size optional—½ lap-mitre and rebate joint.
3. Table Book Trough (Ends to be designed by boys—simple open Mortise and Tenon Joint. Chip Carving to be introduced here.
4. Small square stool. 10″ sq. ×10″ high. Mortise and Tenon Joint. Top piece to be in 3 or 4 pieces. Glue-Joint.
5. Elliptical Ink Stand—5 pieces of wood of different-colour glued together or single piece. 9″×6″×5″/8″ with turned feet.
6. Exercises in Turning—(*a*) Chisel handles ; (*b*) Darner ; (*c*) Rolling-Pin, (*d*) Candle stick (2 parts) ; (*e*) Mallet (2 parts).

Supplementary Models :—Pocket Watch Rack. Turban Rack, Wall Book Shelf (made out of strips of wood). Simple Science Apparatus. Octagonal Ruler).

N.B.—(i) In every case, as far as possible, a careful drawing to scale should be made of the object or model to be done.

(ii) Unsatisfactory work should be re-done reducing the dimensions so that the material may be re-used. From the out-set, great emphasis should be laid on accuracy and neatness.

VI Form.

Geographical distribution of timber—With special reference to Mysore—Nature and defects of timber.

Felling, Converting and Seasoning Timber.

Characteristic appearance (grain, etc.,) of—1 teak, 2 rose-wood, 3 yathiga, 4 nandi, 5 aley, 6 halasu, 7 mathi, 8 buruga, 9 cedar—white and red, 10 sandal.—Calculation of the value of timber used including wastage—general idea of cost of tools—Estimation of the value of labour.

The care of tools—Grinding and sharpening—selection of wood for different purposes—appliances used. Grind stones-whet stone. Emery Stone.

The work done should, among others, include:—

1 Dovetail joints, 2. Mortise and Tenon Joints, 3. Rebating, 4. Tongue and Groove Joint.

Models to be made. (Each piece should be finished and then joined. The model should be finally Wax-Polished).

1. Wall Medicine Chest. 14″×10″×6″ deep. (Panel carved or inlaid).
2. Mitre Mortise and Tenon Joint. Picture frame with rebate. Bevelled edges.
3. Book support. (Ends to be designed by the students). Dovetail Joint(Open).
4. Clip-Board. 15″×12″×½″ Tongue and Grove Joint. Teak and Rose wood pieces joined together.
5. Exercises involving repair work to school furniture.

Supplementary Models:—

Apparatus required in the Science Laboratory such as Test Tube holders, pippet holders, etc., Electric Table Lamp Pedestals. Table stationery holder. (Turned leg). Writing desk with single drawer—15″×12″×10″ high. (The clip board made in Ex. 4 to be used for the top).

Exercises in Turning :—

1. Balusters to suit pedestals previously made.
2. Miniature table and chair legs.
3. Turban pegs (Ornamental), Drawing-pulls, Knobs and Drops.

XIII. FIRST AID AND HOME NURSING.

(Three Years Course).

HOME NURSING.

IV Form.

1. Sick Room—Preparation—Furniture, etc.
2. Beds and Bed-Making.
3. Good Nurse. Her dress. Her duties. Roller Bandages and its application.

V Form.

1. Infectious diseases and non-infectious diseases-symptoms measures for prevention-quarantine—disinfection and disinfectants.
2. Details of Nursing, Washing, Dressing, bed-making, lifting helpless patients. Sick diet. How to administer food, medicine to the sick. Bed-sore ; how to avoid and how to treat.
3. Bandages continued.

VI Form.

1. Observation of sick. Helping Doctor during his or her visits.
2. Sick dietary. Sick room cookery.
3. Administration of medicines-stimulants. Baths. Local Remedies. Enemas. Nursing during convalescence.
4. Roller Bandage and its application.

FIRST AID.

IV Form.

1. Elementary Anatomy and Physiology. Human skeleton, Bones, Joints, Muscular system, Circulatory system, Nervous system,—Respiratory system, Digestive system.
2. Triangular Bandage.
3. Treatment of wounds, Bites, Stings.
4. Treatment of Bruises, Burns, Scalds.

V Form.

1. Fractures—Varieties—Causes-symptoms and treatment.
2. Dislocations—Sprains and strain.
3. Haemorrhage—varieties—how to arrest and treatment.
4. Digestive system, First Aid to injuries of Internal organs and internal Haemorrhage.
5. Splints and Bandages.

VI Form.

1. Injuries to Nervous system and apoplexy, Treatment.
2. Respiratory organs. Artificial respiration. Symptoms and First Aid for hanging, drowning, strangulation and suffocation.
3. Poisons—symptoms—antidotes.
4. Foreign body, eye, ear, nose, throat. Treatment.
5. Preparation for reception of accident case. Means of lifting and carrying, Preparation of bed. Removing the clothes. Preparation for Surgeon, Improvisation of First Aid Materials.